VERSATILE

*NukeTape®* is capable of insulating any terminal or splice without any additional or special jacketing. It is oil and sand resistant and can be completely immersed in water without any absorption.

TOUGH

*NukeTape®* survives the grueling qualification testing required by the nuclear industry.

Goes On EASY

*NukeTape®* adheres easily to any surface, including itself, and requires nothing more than a pocketknife for quick application.

Comes Off CLEAN

*NukeTape®* is easily removed from any surface and leaves behind no residue.

Cost-Effective

*NukeTape®* offers all of the advantages above at a price far below heat-shrink products.

About...

**UCI-003XS**

- NUCLEAR QUALIFIED SPLICING TAPE
- Qualified for use in all Safety Related, Harsh environments within Nuclear Power Plants.

**UCI-004XS**

- NON-SAFETY SPLICING TAPE
- The Commercial Grade equivalent of UCI-003XS, intended for use in demanding commercial, industrial and military applications.

**NukeGoop®**

- An equivalent compound to UCI-004XS, NukeGoop is a conformable material for filling air gaps and uneven surfaces.
# NukeTape® Technical Data

**United Controls International**

Silicone Rubber-Extruded Tape

P/N: UCI-003XS

**Typical Properties – Electrical and Mechanical**

<table>
<thead>
<tr>
<th>PROPERTY</th>
<th>METHOD</th>
<th>NOMINAL REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dielectric Strength (Short Time, ¼” Electrodes)</td>
<td>ASTM D-2148</td>
<td>300 Volts per Mil</td>
</tr>
<tr>
<td>Tensile Strength</td>
<td>ASTM D-1708 or ASTM D-3759</td>
<td>800 PSI Minimum</td>
</tr>
<tr>
<td>Elongation</td>
<td>ASTM D-1708 or ASTM D-3759</td>
<td>300% Minimum</td>
</tr>
<tr>
<td>Bond Strength (Fusion)</td>
<td>ASTM D-2148</td>
<td>Tape shall not unwind more than 2” after 3 minutes with an attached 600g weight</td>
</tr>
</tbody>
</table>

**TYPICAL TAPE CHARACTERISTICS:**

- Self-bonding – No Adhesive or Added Heat Required
- Excellent Thermal Resistance – Up to 400°F Continuous Use
- Waterproof – Less than 3% Water Absorption (MIL A-A-59163A and Fed Std 601 method 6251); 48-hour Immersion
- Arc-Track Resistant
- Weather and Ozone Resistant (-60°F to 400°F)
- Material: Modified Silicone Rubber (composition verified on every manufacturing run via DSC testing)

**TAPE QUALIFICATION SUMMARY:**

The subject electrical tape has completed environmental qualification testing in accordance with the intent of IEEE 383-1974 and is considered qualified for harsh environment applications both inside and outside containment. Environmental Parameters include:

- Qualified Life at 178°F for 40 years (Thermal Aging of >150° for 380 hours, Activation Energy of 1.22eV)
- Radiation Exposure Total Integrated Dose of 2.0 x 108 Rads for 5KV splices and a TID of > 1.18 x 108 Rads for all other splice configurations
- LOCA/HELB Simulation
- In Addition to these tests, the tape has successfully passed IEEE 383 flame testing, submergence testing in 90°C water for 30 days, and a short time steam test at 400°F. This testing is documented in UCI Nuclear Qualification Test Report NQR-UCI-003XS, Revision 1.

**TAPE DESCRIPTION:**

- Color – Blue with white apex color line
- Standard Roll Length – 12 yards
- Release Liner – 0.003” thick red polyester film
- Cores – 1-1/4 inch diameter, 1-1/8 inch wide, 1/8 inch thick
- Tape Nominal Dimensions - 1” wide, 0.040” thickness at apex, 10-30 mil thickness at edges
- Sold in cases of 24 rolls

* This document is a summary of information and is uncontrolled. Please contact your UCI sales representative for more information.